

headaches, dizziness, loss of memory, depression, fatigue, sleep problems, and neck and cervical spine numbness/tingling.

98. Plaintiff Arthur Still ("Still") is 56 years old and resides in Liberty, Missouri. He was an NFL defensive end who played for the Kansas City Chiefs (1978-87), and the Buffalo Bills (1988-89). Still suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Still has experienced cognitive difficulties including, but not limited to headaches, dizziness, loss of memory, impulse control problems, depression, suicidal thoughts, fatigue, sleep problems, irritability, and neck and cervical spine arthritis.

99. Plaintiff Bryan Stoltenberg ("Stoltenberg") is 39 years old and resides in Sugar Land, Texas. He was an NFL center and offensive guard who played for the San Diego Chargers (1996), the New York Giants (1997) and the Carolina Panthers (1998-2000). Stoltenberg suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Stoltenberg has experienced cognitive difficulties including, but not limited to headaches, dizziness, loss of memory, depression, fatigue, sleep problems, irritability, and numbness and tingling in neck and cervical spine.

100. Plaintiff William Truax ("Truax") is 68 years old and resides in Gulfport, Mississippi. He was an NFL tight end who played for the Los Angeles Rams (1964-70), and the Dallas Cowboys (1971-73). Truax suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Truax has experienced cognitive difficulties including, but not limited to headaches, dizziness, and neck and cervical spine arthritis and associated numbness/tingling.

102. Plaintiff Phil Villapiano (“Villapiano”) is 62 years old and resides with his wife in Rumson, New Jersey. He was an NFL linebacker who played for the Oakland Raiders (1971-79), and the Buffalo Bills (1980-83). He was a four-time Pro Bowl selection (1973-76), and a Super Bowl Champion with Raiders in Super Bowl XI. Villapiano suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Villapiano has experienced cognitive difficulties including, but not limited to loss of memory, sleep problems, irritability, and numbness/tingling in neck and cervical spine.

104. Plaintiff Larry Webster (“Webster”) is 42 years old and resides in Baltimore, Maryland. He was an NFL defensive tackle who played for the Miami Dolphins

(1992-94), the Cleveland Browns (1995), the Baltimore Ravens (1996-01), and the New York Jets (2002). Webster was a member of the Ravens' Super Bowl XXXV Champion ship team. Webster suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Webster has experienced cognitive difficulties including, but not limited to headaches, dizziness, depression, fatigue, sleep problems, irritability, neck and cervical spine arthritis and associated numbness/tingling.

105. Plaintiff Michael Weddington ("Weddington") is 51 years old and resides with his wife in Simi Valley, California. He was an NFL line backer who played for the Green Bay Packers (1986-90). Weddington suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Weddington has experienced cognitive difficulties including, but not limited sleep problems, irritability, neck and cervical spine arthritis and associated numbness/tingling.

106. Plaintiff Edward White ("White") is 64 years old and resides in Julian, California. He was an NFL offensive guard for the Minnesota Vikings (1969-77) and the San Diego Chargers (1978-85). White was a four-time Pro Bowl selection (1975-77 and 1979), and is one of only 10 players to have played in all four Vikings' Super Bowl appearances. When he retired, no professional football player had played in more games as an offensive lineman (241 games played). White suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, White has experienced cognitive difficulties.

107. Plaintiff James Williams ("Williams") is 43 years old and resides in Duluth, Georgia. He was an NFL linebacker who played for the New Orleans Saints (1990-94), the Jacksonville Jaguars (1995-96), the Atlanta Falcons (1996-97), the San Francisco 49ers

(1997-98), and the Cleveland Browns (1999). Williams was selected by the Jacksonville Jaguars in the 1995 Expansion Draft. Williams suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Williams has experienced cognitive difficulties including, but not limited to headaches, dizziness, loss of memory, dementia, impulse control problems, neurological disorder, depression, suicidal thoughts, sleep problems, irritability, neck and cervical arthritis and associated numbness/tingling.

108. Plaintiff Mike Wood ("Wood") is 57 years old and resides in Missouri. He was an NFL kicker who played for the Minnesota Vikings (1978), the St. Louis Cardinals (1978-80), and the Baltimore Colts (1981-82). Wood suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Wood has experienced cognitive difficulties.

109. Plaintiff Larry Woods ("Woods") is 63 years old and resides in Houston, Texas. He was an NFL defensive tackle who played for the Detroit Lions (1971-72), the Miami Dolphins (1973), the New York Jets (1974-75), and the Seattle Seahawks (1976). Woods suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Woods has experienced cognitive difficulties.

110. Plaintiff Marvin Woodson ("Woodson") is 70 years old and resides with his wife in Dallas, Texas. He was an NFL defensive back who played for the Pittsburgh Steelers (1964-69), and the New Orleans Saints (1969). Woodson suffered repeated and chronic head impacts during his career in the NFL and is at an increased risk of latent brain disease. As a result, Woodson has experienced cognitive difficulties including, but not limited to headaches,

dizziness, loss of memory, impulse control problems, depression, suicidal thoughts, sleep problems, irritability, and numbness/tingling in neck and cervical spine.

111. Defendant NFL, which maintains its offices at 280 Park Avenue, New York, New York, is an unincorporated association consisting of the 32 separately-owned and independently-operated professional football teams that are listed below. The NFL is engaged in interstate commerce in the business of, among other things, operating the sole major professional football league in the United States. The NFL is not, and has not, been the employer of the Plaintiffs, all of whom were employed during their respective careers in professional football by the clubs indicated above. The United States Supreme Court held last year in *American Needle, Inc. v. NFL*, 130 S.Ct. 2201, 2212-13 (2010) that each team that is a member of the NFL association is a legally distinct and separate entity from both other teams and the League itself:

The NFL teams do not possess either the unitary decisionmaking quality or the single aggregation of economic power characteristic of independent action. Each of the teams is a substantial, independently owned, and independently managed business. “[T]heir general corporate actions are guided or determined” by “separate corporate consciousnesses,” and “[t]heir objectives are” not “common.” . . . The teams compete with one another, not only on the playing field, but to attract fans, for gate receipts and for contracts with managerial and playing personnel.

112. The 32 separately-owned and independently-operated professional football teams mentioned above are:

NFL Team Owner	State of Organization	Team Name (City)
Arizona Cardinals, Inc.	Arizona	Arizona Cardinals
Atlanta Falcons Football Club LLC	Georgia	Atlanta Falcons
Baltimore Ravens Limited Partnership	Maryland	Baltimore Ravens

Buffalo Bills, Inc.	New York	Buffalo Bills
Panthers Football LLC	North Carolina	Carolina Panthers
Chicago Bears Football Club, Inc.	Delaware	Chicago Bears
Cincinnati Bengals, Inc.	Ohio	Cincinnati Bengals
Cleveland Browns LLC	Delaware	Cleveland Browns
Dallas Cowboys Football Club, Ltd.	Texas	Dallas Cowboys
Denver Broncos Football Club	Colorado	Denver Broncos
Detroit Lions, Inc.	Michigan	Detroit Lions
Green Bay Packers, Inc.	Wisconsin	Green Bay Packers
Houston NFL Holdings LP	Delaware	Houston Texans
Indianapolis Colts, Inc.	Delaware	Indianapolis Colts
Jacksonville Jaguars Ltd.	Florida	Jacksonville Jaguars
Kansas City Chiefs Football Club, Inc.	Texas	Kansas City Chiefs
Miami Dolphins, Ltd.	Florida	Miami Dolphins
Minnesota Vikings Football Club LLC	Minnesota	Minnesota Vikings
New England Patriots, LP	Delaware	New England Patriots
New Orleans Louisiana Saints LLC	Texas	New Orleans Saints
New York Football Giants, Inc.	New York	New York Giants
New York Jets Football Club, Inc.	Delaware	New York Jets
Oakland Raiders LP	California	Oakland Raiders
Philadelphia Eagles Football Club, Inc.	Delaware	Philadelphia Eagles
Pittsburgh Steelers Sports, Inc.	Pennsylvania	Pittsburgh Steelers
San Diego Chargers Football Co.	California	San Diego Chargers

San Francisco Forty Niners Ltd.	California	San Francisco 49ers
Football Northwest LLC	Washington	Seattle Seahawks
The Rams Football Company LLC	Delaware	St. Louis Rams
Buccaneers Limited Partnership	Delaware	Tampa Bay Buccaneers
Tennessee Football, Inc.	Delaware	Tennessee Titans
Washington Football Inc.	Maryland	Washington Redskins

113. Defendant NFL Properties, LLC as the successor-in-interest to National Football League Properties Inc. ("NFL Properties") is a limited liability company organized and existing under the laws of the State of Delaware with its headquarters in the State of New York. NFL Properties is engaged in, among other activities, approving, licensing and promoting equipment used by all the National Football League teams. NFL Properties regularly conducts business in California.

114. Defendants National Football League and NFL Properties shall be referred to collectively herein as the "NFL" or "League."

115. The NFL caused or contributed to the injuries alleged herein through its voluntary undertaking including its acts and omissions in misrepresenting the true risks of repeated traumatic brain and head impacts in NFL football, and failing to take appropriate steps to prevent and mitigate repeated traumatic brain and head impacts in the NFL and the latent neurodegenerative disorders and diseases caused by these impacts.

116. Third parties that conspired with the NFL in the tortious conduct alleged herein include but are not limited to the member NFL clubs identified herein and Riddell Inc., d.b.a. Riddell Sports Group, Inc., All American Sports Corp. d.b.a. Riddell/All American,

Riddell Sports Group, Inc., Easton-Bell Sports, Inc., and Easton-Bell Sports LLC, EB Sports Corp.

MASS ACTION AND JOINDER ALLEGATIONS

117. Joinder is permissible pursuant to Fed. R. Civ. P. 20(a) in that the claims alleged herein arise out of the same series of occurrences, and questions of law or fact common to all Plaintiffs arise in this action.

118. Common questions of law and fact will arise in this action, including but not limited to:

- a. Whether the NFL, through its own voluntary undertaking, was negligent in its response to the health effects of repeated head impacts and the injuries consequently suffered by the Plaintiffs;
- b. Whether § 301 of the Labor Relations Management Act preempts Plaintiffs' tort law claims pled herein;
- c. Whether the NFL committed negligence and/or fraud in misrepresenting the risks of repeated head impacts in NFL play to the Plaintiffs; and
- d. Whether repeated head impacts during play in the NFL cause latent neurodegenerative brain disorders and disease.

NATURE OF NFL'S BUSINESS

119. The primary business in which the NFL and its member clubs are engaged is the operation of major league professional football teams and the sale of tickets and telecast rights to the public for the exhibition of the individual and collective football talents of players such as Plaintiffs.

120. The NFL's transactions involve collective annual expenditures and

The NFL is like Procter & Gamble. There's the holding company, the core operation, but then each brand has its own team and world of revenue. Like Tide: That's a P&G product but within that there are different types of Tide and a number of people that make money from it. So the \$9.3 billion pie just scratches the surface and doesn't get into how much is spent around stadiums, merchandise, agents, all the way down to mom-and-pop shops.

121. Annually, the NFL redistributes upwards of \$4 billion in radio, television

122. Companies pour money into the league's coffers for the right to associate

deals in sports history. It encompasses a number of Pepsi brands (Pepsi, Frito-Lay, Tropicana, Quaker Oats and Gatorade). This deal, combined with a number of other new sponsorships, ticket sales projections & TV ratings, means that the NFL is projecting record revenues of over \$9.5 billion this season.

123. Teams can collect \$25-\$30 million for stadium naming rights, usually on 10-year deals. The largest is Reliant Energy's \$10 million per year contract with the Houston Texans. In Los Angeles, Farmers Insurance has promised \$700 million over 30 years to name a stadium for a team that doesn't exist yet.

124. Many clubs that are part of the NFL association own in whole or in part the stadiums in which they play, which can be a source of major commercial value, as reflected in the following chart:

STADIUM, TEAM	OPENED	PRICE (2010 DOLLARS)	% PRIVATE
New Meadowlands, NY	2010	\$1.6B	100
Cowboys Stadium, DAL	2009	\$1.15B	56
Lucas Oil Field, IND	2008	\$780M	13
U. of Phoenix Stadium, ARI	2006	\$493M	32
Lincoln Financial, PHI	2003	\$588M	65
Ford Field, DET	2002	\$504M	49
Gillette Stadium, NE	2002	\$373M	100
Reliant Stadium, HOU	2002	\$526M	39

Qwest Field, SEA	2002	\$422M	29
Invesco Field, DEN	2001	\$683M	39
Heinz Field, PIT	2001	\$312M	16

125. In 2010, more than 17 million fans passed through turnstiles operated by clubs that are part of the NFL association, paying anywhere from \$54.51 (Cleveland Browns) to \$117.84 (New England Patriots) for the average game ticket. Though the league won't open its books, numbers for the publicly-held Green Bay Packers ("Packers") offer some insight into what teams reap at the ticket office and concession stands. In 2010, the Packers cleared \$60,059,646 from home and away game tickets plus private boxes. Projected over 32 teams, that's nearly \$2 billion annually. The Packers reaped \$13 million from concessions, parking and local media in 2010, which translates to \$416 million on a league-wide basis.

FACTUAL ALLEGATIONS

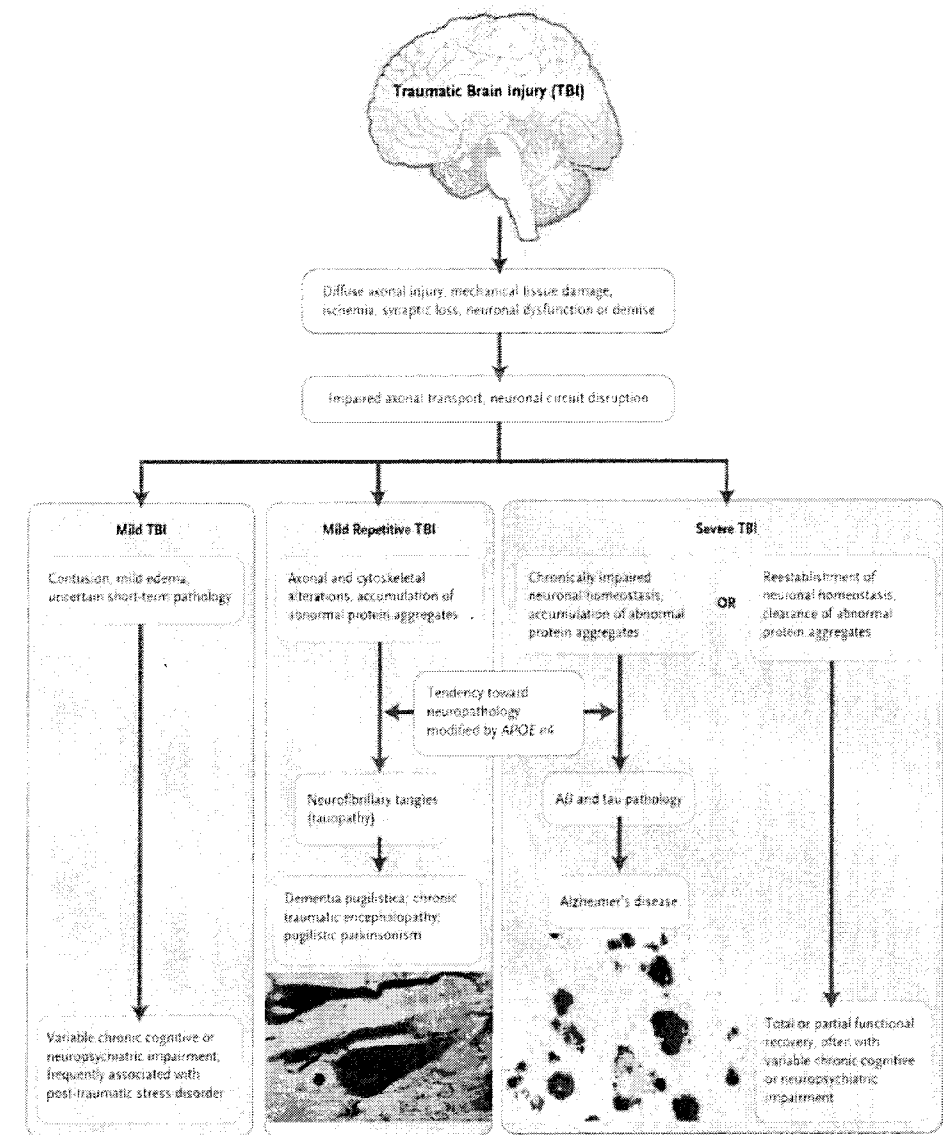
A. The Scientific Evidence On Concussions And Head Injuries And The NFL's Responses To It.

126. A 2011 article in the Journal of Sports & Entertainment Law of Harvard Law School has summed up the consequences of concussions to athletes (footnotes omitted):

From high school leagues to the NFL, football players are becoming bigger, faster, and stronger, thereby increasing the force of collisions that occur during a game and increasing the potential for serious injuries. The brain is a soft organ, surrounded by cerebrospinal fluid and protected by the tough, bony skull. Normally, the fluid around the brain serves as a protective cushion for the brain, isolating it from direct impact to the skull. When the head suffers violent impact, the brain can hit the skull, causing the brain temporarily to stop working normally. This is called a concussion.

More serious injuries occur after the initial concussion. A concussion causes brain cells to become depolarized and allows neurotransmitters to behave in an abnormal fashion, causing such symptoms as memory loss, nausea, and confusion. After the initial concussion, when the brain is not fully healed, it is very fragile and susceptible to minor accelerative forces. Thus, subsequent minor hits may cause traumatic and permanent brain injury. This is the heart of the problem: players returning to the football field before allowing their initial concussion to heal fully. When the player returns to the field too early, he is at risk for what is known as Second Impact Syndrome (SIS). SIS is the event that ensues when there is a subsequent brain impact before the initial concussion has been given time to heal. Additionally, when concussions occur with high frequency, a disease called Chronic Traumatic Encephalopathy (CTE) may occur in the brain. "CTE is a progressive neurodegenerative disease caused by repetitive trauma to the brain which eventually leads to dementia." While CTE was originally diagnosed most commonly in boxers, it is now regularly found in football players. **Of all sports related injuries, concussions are the injuries that most often go unnoticed and untreated, especially in football.** (Emphases added).

127. The following chart, excerpted from a 2010 article in the *New England Journal of Medicine* entitled "Traumatic Brain Injury--Football, Warfare And Long-Term Effects" shows how even repetitive mild traumas can have lasting consequences:



Spectrum of Pathologic Features and Outcomes of Traumatic Brain Injury (TBI).

In the left inset, Bielschowsky silver stain shows intraneuronal and extracellular neurofibrillary tangles in temporal cortex from a retired boxer with dementia pugilistica.¹ The right inset shows diffuse Aβ plaque deposits in temporal cortex from a subject who sustained severe TBI.²

128. The NFL's responses to the issue of brain injuries caused to retired NFL players because of concussions or head impacts received during the period that they played professional football has been, until very recently, one of deception and denial. The NFL and several of the scientists it employed actively tried to conceal the extent of the problem until recently. The response of the League once it acknowledged the issue has been inadequate.

129. The League's disinformation campaign was spearheaded by its Mild Traumatic Brain Injury Committee ("MTBI Committee", sometimes also referred to in press reports as the "Concussion Committee"), which was created by the NFL's own initiative and voluntary undertaking in 1994, and chaired from 1994 to February of 2007 by Dr. Elliott Pellman ("Pellman"), a rheumatologist who reportedly attended medical school in Guadalajara, Mexico. Dr. Pellman worked with two other scientists on the MTBI Committee—Dr. Ira Casson ("Casson"), a neurologist, and Dr. David Viano ("Viano"), a biomechanical engineer—to attempt to discredit a slew of scientific studies that linked head impacts and concussions received by NFL players to brain injuries. Casson and Viano replaced Pellman as co-chairs of the MTBI Committee in February of 2007.

130. Since 1994, the MTBI Committee had been conducting a study to determine the effect of concussions on the long-term health of retired NFL players. In a November 2007 report to Congress, NFL Commissioner Roger Goodell ("Goodell") said that the MTBI Committee's study was in its "initial" data collection phase and that "[w]e do not know when this study will be completed, although it is likely that a comprehensive study will require at least several years of research and analysis."

131. In October of 2006, Pellman and Viano published in Neurological Focus an interim report on the MTBI Committee's efforts that surveyed 12 years of data collection. The authors analyzed collected "data on mild TBIs sustained between 1996 and 2001" and concluded that:

[B]ecause a significant percentage of players returned to play in the same game [as they suffered a mild traumatic brain injury] and the overwhelming majority of players with concussions were kept out of football-related activities for less than 1 week, it can

be concluded that mild TBIs in professional football are not serious injuries. (Emphases added).

132. As explained further below, this conclusion was against the weight of the scientific evidence, a fact that the members of the MTBI Committee well knew; it was also based on biased data collection techniques. As ESPN reported in February of 2007:

Last fall, ESPN The Magazine reported that Pellman was selective in his use of injury reports in reaching his conclusions and omitted large numbers of players from the league's concussion study. His findings also contradicted other scientific studies into the effects of concussions:

- **In January 2005, Pellman and his colleagues wrote that returning to play after a concussion "does not involve significant risk of a second injury either in the same game or during the season." But a 2003 NCAA study of 2,905 college football players found just the opposite: Those who have suffered concussions are more susceptible to further head trauma for seven to 10 days after the injury.**

- **Pellman, a rheumatologist, and his group have also stated repeatedly that their work shows "no evidence of worsening injury or chronic cumulative effects of multiple [mild traumatic brain injury] in NFL players." But a 2003 report by the Center for the Study of Retired Athletes at the University of North Carolina found a link between multiple concussions and depression among former pro players with histories of concussions. And a 2005 follow-up study at the Center showed a connection between concussions and both brain impairment and Alzheimer's disease among retired NFL players.** (Emphases added).

133. The concerns about head injuries associated with the playing of football—and the refusal to recognize those concerns by those in charge of the game—have a long history. On Monday, February 1st, 2010, Dr. Bennet Omalu ("Omalu"), Co-Director of the Brain Injury

Institute at West Virginia University, spoke before members of the House Judiciary Committee at a forum in Houston, Texas with regard to “Head and Other Injuries in Youth, High School, College, and Professional Football.” In his prepared testimony, he explained:

Glenn Pop Warner [1871 – 1954] founded the Pop Warner youth football league in 1929. He still remains one of the greatest football coaches in the history of American football. The single event, which necessitated the use of pads and helmets by football players took place in 1888 when the annual rules convention for the emerging sport of college football passed a rule permitting tackling below the waist.

“Football changed dramatically. Teams no longer arrayed themselves across the entire breadth of the field. Teams bunched themselves around the runner to block for him. The wedge and mass play arrived. Football became, for a time, a savage sport full of fights, brawling, even fatalities.”

In 1912, Pop Warner said: "Playing without helmets gives players more confidence, saves their heads from many hard jolts, and keeps their ears from becoming torn or sore. I do not encourage their use. I have never seen an accident to the head which was serious, but I have many times seen cases when hard bumps on the head so dazed the player receiving them that he lost his memory for a time and had to be removed from the game."

We have known about concussions and the effects of concussions in football for over a century. Every blow to the head is dangerous. Repeated concussions and sub-concussions both have the capacity to cause permanent brain damage. During practice and during games, a single player can sustain close to one thousand or more hits to the head in only one season without any documented or reported incapacitating concussion. Such repeated blows over several years, no doubt, can result in permanent impairment of brain functioning especially in a child. (Footnotes omitted; emphases added).

134. The scientific evidence on concussions and subsequent brain disease in boxing, football, and other sports has been mounting, but for a long period, the NFL attempted to deny, discredit, and ignore it.

135. The risk of repeated head impacts in certain sports and brain disease has been understood for decades. In 1928, a New Jersey pathologist, Harrison Martland, described the clinical spectrum of abnormalities found in "nearly one half of the fighters who stayed in the game long enough." Follow-up studies on encephalopathy and repeated head impacts in sport were published in 1952. The risk of second impacts (Second Impact Syndrome) in sport was identified in 1973. It was also clear by the 1970's that the patterns of neurodegeneration associated with head impacts in boxing also occurred in other sports.

136. From 1931 to 2006, the National Center for Catastrophic Sport Injury Research has reported 1,006 direct and 683 indirect fatalities resulting from participation in all organized football in the United States; the annual number of indirect fatalities has remained near 9.0 per year.

137. A 1994 Ball State University survey found that "players in the 1980s suffered serious injuries and underwent operations at twice the rate of those who played in the 1950s or earlier."

138. A study presented at the American Academy of Neurology's 52nd Annual Meeting in 2000 and authored principally by Dr. Barry Jordan, Director of the Brain Injury Program at Burke Rehabilitation Hospital in White Plains, New York, surveyed 1,094 former NFL players between the ages of 27 and 86 and found that: (a) more than 61 % had suffered at least one concussion in their careers with 30 % of the players having three or more and 15 % having five or more; (b) 51% had been knocked unconscious more than once; (c) 73 % of those

injured said they were not required to sit on the sidelines after their head trauma; (d) 49 % of the former players had numbness or tingling; 28 % had neck or cervical spine arthritis; 31 % had difficulty with memory; 16 % were unable to dress themselves; and 11 % were unable to feed themselves; and (e) eight suffered from Alzheimer's disease.

139. A 2001 report by Dr. Frederick Mueller that was published in the Journal of Athlete Training reported that a football-related fatality has occurred every year from 1945 through 1999, except for 1990. Head-related deaths accounted for 69 % of football fatalities, cervical spinal injuries for 16.3 %, and other injuries for 14.7 %. High school football produced the greatest number of football head-related deaths. From 1984 through 1999, 69 football head-related injuries resulted in permanent disability.

140. A series of important studies emanated from the University of North Carolina ("UNC") that were attacked by members of the NFL's MTBI Committee.

141. A 2000 UNC study found that in the period between 1977 and 1998, an annual average of 13 athletes had suffered catastrophic injuries (primarily permanent paralysis) as the direct result of participation in football. The study also found that between 1977 and 1998, 200 football players received a permanent cervical cord injury, and 66 sustained a permanent cerebral injury." As reported in *Science Daily*:

The study, published in the September-October issue of the American Journal of Sports Medicine, suggests that the brain is more susceptible to injury when it has not had enough time to recover from a first injury. Researchers say the finding is important because concussions can lead to permanent brain damage, vision impairment or even death if not managed properly.

"We believe recurrences are more likely because injured players are returning to practice and to games too quickly after blows to the head," said Dr. Kevin M. Guskiewicz, assistant professor of exercise

and sport science at UNC-CH and study leader. "Many clinicians are not following the medical guidelines that players should be symptom-free for several days before returning." (Emphases added).

142. A 2003 study partially authored by the aforementioned Dr, Kevin Guskiewicz ("Guskiewicz") of UNC analyzed data from almost 2,500 retired NFL players and found that 263 of the retired players suffered from depression. The study found that having three or four concussions meant twice the risk of depression as never-concussed players and five or more concussions meant a nearly threefold risk.

143. In November of 2003, Guskiewicz was scheduled to appear on HBO's "Inside the NFL" to discuss his research. Pellman, who was also going to be on the show, called Guskiewicz. "I had never spoken with him before, and he attacked me from the get-go," Guskiewicz said. "He questioned whether it was in my best interest to do the show. He was a bull in a china shop." **On the program, Pellman said unequivocally, "[w]hen I look at that study, I don't believe it." (Emphases added).**

144. In 2005, Guskiewicz did a follow-up to his 2003 study and found that retired NFL players who sustained three or more concussions had a fivefold greater likelihood of suffering Mild Cognitive Impairment ("MCI") than retired NFL players who had no history of concussions. Guskiewicz based his conclusions on a survey of over 2,550 former NFL players. **Dr. Mark Lovell ("Lovell") of the NFL's MTBI Committee asserted that Guskiewicz's study lacked "scientific rigor" and that one couldn't tell anything from a survey.**

145. **"Pellman's committee has repeatedly questioned and disagreed with the findings of researchers who didn't come from their own injury group," said Julian Bailes, Chairman of Neurosurgery at West Virginia University.**

146. The MTBI Committee decided to respond to these types of studies by presenting **biased research** derived from its ongoing survey of retired NFL players. ESPN The Magazine described what happened:

In October 2003, Pellman and members of his committee published the first of a long-running series on concussions in *Neurosurgery*, a scholarly journal edited by Mike Apuzzo, the New York Giants' neurosurgical consultant. The committee's earliest studies used crash test dummies to reenact helmet blows. Later, the group decided to explore the ill effects of multiple concussions, and Pellman charged one of its members, Mark Lovell, head of the University of Pittsburgh Medical Center's Sports Medicine Concussion Program, to oversee the collection and analysis of leaguewide data. Pellman chose Lovell because he had conducted neuropsychological tests for the Steelers as early as 1993. And in 1995, Lovell began to run the NFL's neuropsychology program, which encouraged teams to gather data to help decide when to return players to games.

Using the information they would obtain, Pellman, Lovell and the committee planned to look at baseline results and identify a normal range of scores for uninjured NFL players. Then, comparing postinjury scores to baseline data would show the effects of concussions. Comparing data from players with multiple concussions to that of all injured players would show whether concussive effects changed as injuries accumulated.

A lot was riding on the analysis. The committee had never imposed recommendations on team medical staffs. **But this was the first study ever to analyze the brain function of NFL athletes. If it showed that concussions were significantly impairing players, the league might be forced to institute new rules for evaluating and treating head injuries.** Pellman and Lovell both say they invited all teams to participate in the research (Lovell says 11 teams elected to join the study) and tried to collect as many results as they could. As Lovell puts it, "More data is always better." **Several of the doctors involved, however, tell a different story.** [William]

Barr [a neuropsychologist at Long Island Jewish Hospital], for example, conducted 217 baseline tests from 1996 to 2001. Periodically, he forwarded results to the league, but at the time Barr learned the committee was planning to publish its results, he had sent only 149. Barr remembers finding Pellman in the Jets' training room in 2003 and saying, "Elliot, I haven't sent data for a year." **According to Barr, Pellman didn't want the additional tests.** "I don't want the data to be biased because I'm with the Jets," Barr recalls him saying, suggesting that additional results would skew the data because the Jets would be overrepresented in the sample. **That made no sense to Barr. A scientific study should include, or at least address, all available data.**

Pellman denies this conversation ever took place. "Bill Barr was a consultant for the Jets who tested individual players to help us make decisions," he says. "I did not discuss the committee's research with him." **Whoever is right, the fact is the group didn't have all of Barr's data for its paper.**

Barr's wasn't the only research that didn't make the cut. Over the period covered by the committee's research, Christopher Randolph, a Chicago neuropsychologist, collected baselines for 287 Bears players. **He says Lovell never asked for his data, either.**

Nor did the committee seek complete data from John Woodard, neuropsychologist for the [Atlanta] Falcons and associate psychology professor at the Rosalind Franklin University of Medicine and Science in North Chicago. According to Woodard, in December 2003, Lovell said the league was pressuring him to compile team results. "I was asked to provide data on only concussed players," **Woodard says. "I had data for slightly more than 200 baseline evaluations. I don't know why I was not asked for them."**

In 2004, Lovell also asked Richard Naugle, consultant to the Browns and head neuropsychologist at the Cleveland Clinic, for data on just the players who had already suffered concussions, according to an e-mail Naugle wrote to a colleague in March 2005. Naugle declined to comment for this story, citing a confidentiality deal between his medical group and the NFL, but The

Magazine has obtained a copy of that message. "I don't have that sorted out from the results of other testing," Naugle wrote of the request. "I explained that and added that if he could name players, I could send data on those individuals. I recall sending him data on two or three players ... I have a few hundred baselines."

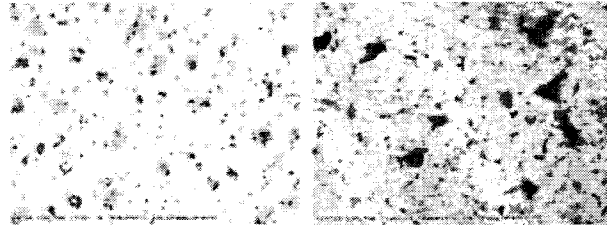
This means Pellman, Lovell and their colleagues didn't include at least 850 baseline test results in their research—more than the 655 that ultimately made it into their 2004 *Neurosurgery* paper. At best, their numbers were incomplete. At worst, they were biased.

Pellman, Lovell and their colleagues published their sixth paper in *Neurosurgery* in December 2004. It examined baseline data on 655 players and results for 95 players who had undergone both baseline testing and postconcussion testing. It concluded that NFL players did not show a decline in brain function after suffering concussions. Further analysis found no ill effects among those who had three or more concussions or who took hits to the head that kept them out for a week or more. **The paper didn't explain where the players in the groups came from specifically or why certain players were included and hundreds of others were not. Neither Pellman nor Lovell has provided those details since.** (Emphases added).

147. Scientists concurred with this assessment. As the ESPN The Magazine article noted:

The decision to publish the paper was controversial. "I highly doubt this study would have seen the light of day at this journal were it not for the subject matter of NFL players," says Robert Cantú, chief of neurosurgery and director of sports medicine at Emerson Hospital in Concord, Mass., and a senior editor at *Neurosurgery*. "The extremely small sample size and voluntary participation suggest there was bias in choosing the sample. The findings are extremely preliminary at best, and no conclusions should be drawn from them at this time."

151. The following photographs, available from Brain-Pad Blog, show the contrast between a normal brain (depicted on the left) and Webster's autopsied brain (depicted on the right):



152. In response to Omalu's article on Webster, Casson of the NFL's MTBI Committee wrote a letter in July of 2005 to the editor of *Neurosurgery* asking that Omalu's article be retracted.

153. In 2008, Dr. Ann McKee ("McKee") of the CSTE at BUSM examined the brain tissue of two other deceased NFL players: (a) John Grimsley ("Grimsley") of the Houston Oilers, who died of a gunshot wound at the age of 45; and (b) and Tom McHale ("McHale") of the Tampa Bay Buccaneers, Philadelphia Eagles and Miami Dolphins, who died of a drug overdose at the age of 45. McKee found that Grimsley and McHale's brain tissue exhibited indications of CTE. As she stated, **"the easiest way to decrease the incidence of CTE [in contact sport athletes] is to decrease the number of concussions."** (Emphases added). She further noted that "[t]here is overwhelming evidence that [CTE] is the result of repeated sublethal brain trauma." A *Washington Post* article published in early 2009 reported the following comments by McKee with respect to her analysis of McHale's brain:

"Is this something that happened by chance?" asked Ann McKee, a neuropathologist at Boston University pointing to pictures of McHale's brain that she said resembled that of a 72-year-old boxer. **"I can tell you I've been looking at brains for 22 years, and this is not a normal part of aging. This is not a normal part of the brain."** (Emphases added).

155. The increasing controversy drew the attention of Congress. On June 23, 2007, hearings on the NFL's compensation of retired players were held before the Commercial and Administrative Law Subcommittee of the Judiciary Committee of the United States House of Representatives ("C&A Subcommittee"). Plaintiff Boyd testified about post-retirement health problems he faced as a result of concussions he received while he played for the Minnesota Vikings. Goodell was one of those who testified at this hearing. In follow-up responses to the C&A Committee that Goodell sent in November of 2007, he continued to rely on the discredited survey research being undertaken by the MTBI Committee.

"I'm not even sure we athletes know what a concussion is," said safety Troy Vincent, who also is president of the

While the NFL commission has focused on short-term effects of concussions, recent findings suggest players may suffer depression, dementia and other symptoms later in life. (Emphases added).

157. The result of this conference was a complete whitewash of the problem by the NFL. The League issued a press release and pamphlet to players on August 14, 2007. It stated that:

Current research with professional athletes has not shown that having more than one or two concussions leads to permanent problems.... It is important to understand that there is no magic number for how many concussions is too many. (Emphases added).

158. This act of denial and deception was consistent with the positions taken by Pellman, Casson, Lovell, and Viano as described above.

159. The NFL's refusals to face reality and its attempts to cover up the links between on-field concussions or head impacts and brain injuries are exacerbated by the way its member clubs provide medical services top players. As one 2009 article explained:

The conflicted interests that burden many NFL trainers exacerbate the NFL's concussion problem. An emerging practice in sports medicine involves medical providers "auctioning off the right to be an NFL team's 'official' medical provider, hospital, or physician-group." The privilege of being selected comes with the right to advertise in one's promotional materials that her group has been named the "official healthcare provider" of a particular team. "In return, the team is provided with medical care for free or at reduced cost."

NFL players are the victims of this pay-to-play system as they receive medical care compromised by the financial interests of NFL trainers. It is no secret that the NFL is a business, and an extremely successful one at that. When trainers are intertwined with team management, their medical decisions become clouded by the number one money-making criterion in the NFL business: *winning*. In order for teams to maximize profit through winning games, it stands to reason that coaches and management place incredible pressure on trainers to return their most talented athletes to the playing field as soon as possible. Concussions might represent one of the injuries that trainers send their patient-athletes back on the field with before players are completely healed.

Former New York Jets lineman Peter Kendall efficiently articulated the conflict-ridden nature of team physicians' return-to-play decisions: "I see guys playing in games that I don't think a personal advocate would allow them to do[.] The doctor who is supposed to be looking out for you is also the same guy who may put you into a game that the team has to win. You're mixing business with medicine." Thus, in three sentences, Kendall summarized the risk involved with trainers practicing medicine under conflicted financial and medical interests.

The physician-patient dynamic of the New York Jets presents a paradigm conflict of interest. Dr. Elliot

Pellman serves as *both* the Director of Medical Services for the New York Jets *and* as NFL Concussion Committee member. Because of Pellman's dual role, the Jets concussion policies and procedures have drawn heightened scrutiny from outside observers.

Pellman's management of the concussion Jets wide receiver Wayne Chrebet sustained on November 2, 2003 triggered significant criticism from both scientists and players. In this November 2, 2003 game against the New York Giants, Chrebet's concussion left him face down in an unconscious state for several minutes. Pellman elected to send Chrebet back into contact during the *same* game despite Chrebet's prolonged state of unconsciousness. Chrebet was subsequently placed on injured reserve for the remainder of the season. "Chrebet, 34, has recently acknowledged that he has bouts of depression and memory problems so severe that he cannot make the routine drive from his New Jersey home to his Long Island restaurant without a global positioning system." (Emphases partly in original; footnotes omitted).

160. ESPN The Magazine reported vividly on this incident:

"There's going to be some controversy about you going back to play." Elliot Pellman looks Wayne Chrebet in the eye in the fourth quarter of a tight game, Jets vs. Giants on Nov. 2, 2003, at the Meadowlands. A knee to the back of the head knocked Chrebet stone-cold unconscious a quarter earlier, and now the Jets' team doctor is putting the wideout through a series of mental tests. Pellman knows Chrebet has suffered a concussion, but the player is performing adequately on standard memory exercises. "This is very important for you," the portly physician tells the local hero, as was later reported in the *New York Daily News*. "This is very important for your career." Then he asks, "Are you okay?" When Chrebet replies, "I'm fine," Pellman sends him back in.

A couple of days after Wayne Chrebet is knocked senseless by the Giants, he is sluggish and tired, and his head aches. "It was stupid, trying to get back out there," he says. "That's just me trying to convince them and

myself that everything is all right." The Jets staff, including Pellman and Barr, diagnose Chrebet with postconcussion syndrome. Ten days after the game, the Jets place Chrebet on injured reserve.

Pellman makes no apologies. "Wayne returned and was fine," he tells the media. "He did not suffer additional injury. If he had suffered additional injury, his prognosis would be no different.

"Let's say I didn't allow him to return to play, and he played the following week," he continues. "The same thing could have happened. The decision about Wayne returning to play was based on scientific evaluation. As we stand now, that decision made no difference as to what's happening today.

"This decision is so that I can sleep well at night and so Wayne's wife can sleep well at night," he says about ending Chrebet's season.

"Nobody gets second-guessed."

161. This incident corroborates another factor contributing to the NFL's practices—that NFL player contracts are structured in a manner to incentivize underreporting of concussions. Such contracts typically do not guarantee payment to players beyond the season in which an injury occurs. If the player cannot pass the medical check-up at the commencement of the subsequent season, the contract is voided and the player may end up paying medical expenses for brain injuries or cognitive impairment incurred on the playing field. This system operates to discourage players from admitting to concussions. As the same 2009 article quoted earlier explained:

A sad consequence of the NFL's player contract scheme is the tendency of players to withhold concussion symptoms from their trainers and team management for fear of losing their jobs. Dr. Kenneth Podell, director of the Sports Concussion Safety Program at the Henry Ford Health System, summarizes the problematic situation: "The pressure

is intense; there's always someone on the bench waiting to take your place."

When team management becomes privy to a player's concussion history, the team holds all leveraging power in restructuring a player's contract. Players are faced with the following Hobson's choice: (i) accept a less lucrative contract or (ii) face employment termination. Dan Morgan, former Carolina Panthers linebacker, suffered at least five concussions during his tenure with the Panthers. Faced with the alternative of termination, Morgan "agreed to restructure his \$2 million roster bonus into payments of \$125,000 for each game played. Beyond acknowledging the team's concerns about subsequent concussions, the contract gave Morgan financial incentive not to reveal any concussion for treatment."

Even when a player is confident enough to disclose his concussive symptoms to a team trainer, he will not likely refuse a coach's orders to return to play for fear of losing his starting position in the lineup. A recent example of this situation involved the New England Patriots franchise. While playing linebacker for the Patriots in 2002, Ted Johnson sustained a severe concussion. After Johnson discussed his symptoms with his team trainer, the trainer advised Patriots coach Bill Belichick not to return Johnson to contact play until he became asymptomatic.

Belichick disregarded the trainer's advice by continually sending Johnson back into full contact practices. In defending his decision to return Johnson to play against the trainer's orders, Belichick said: "'If [Johnson] felt so strongly that he didn't feel he was ready to practice[,] he should have told me.'" The flaw in Belichick's logic is that it assumes Johnson was confident enough in his job security to defy his coach's orders. If Johnson informed Belichick of his inability to return to play, he would have effectively terminated his own contract with the Patriots. (Emphases added).

162. In November of 2008, Greg Aiello ("Aiello") sounded a similar theme, saying to the press that "[h]undreds of thousands of people have played football and other

Dr. Ira Casson, a co-chairman of the concussions committee who has been the league's primary voice denying any evidence connecting N.F.L. football and dementia, said: "What I take from this report is there's a need for further studies to see whether or not this finding is going to pan out, if it's really there or not. I can see that the respondents believe they have been diagnosed. But the next step is to determine whether that is so."

The N.F.L. is conducting its own rigorous study of 120 retired players, with results expected within a few years. All neurological examinations are being conducted by Dr. Casson. (Emphases added).

165. After the publication of the University of Michigan study, the House Judiciary Committee commenced an inquiry into "Legal Issues Relating To Football Head Injuries" and held its first hearing on October 28, 2009. Representative John Conyers ("Conyers") summarized the evidence:

There appears to be growing evidence that playing football may be linked to long-term brain damage. For example, a 2003 University of North Carolina study found that professional players who suffered multiple concussions were three times more likely to suffer clinical depression than the general population. A follow-up study in 2005 showed NFL players suffering concussions had five times the rate of cognitive impairment. And retired players were 37 percent more likely to suffer from Alzheimer's than the population as a whole. Earlier this year, the University of Michigan released a study that found that 6.1 percent of NFL players over 50 years of age reported they had received a dementia-related diagnosis—a statistic five times higher than the national average. Players age 30 through 49 showed a rate of 1.9 percent of dementia-related diagnosis 19 times that of the national average.

The National Football League is performing its own long-term study, **and has largely sought to discredit these reports or some of the conclusions drawn from**

some of these reports. The football league described the reports as flawed.

Dr. Ira Casson, the co-chair of the NFL's Mild Traumatic Brain Injury Committee, denied the linkage on six separate occasions. When asked whether there was any linkage between playing football and CTE, Dr. Casson stated that it has never been scientifically, validly documented. The league said the recent University of Michigan study was flawed and that further study was necessary. The *New York Times* data released last week, was, they said, for self-promotional and lobbying purposes of the union. Given there is no consensus between the league and its players and the medical community about the causes of these cognitive disorders, it should come as no surprise there is little agreement about how to respond. (Emphases added).

166. Representative Linda Sanchez ("Sanchez"), who had participated in the 2007 hearings mentioned earlier, was present and stated:

There are increasing studies and a body of evidence that show that there is a significant risk to individuals who suffer repeated head trauma, whether it's in the NFL, in professional boxing, or even high school sports, and while there are those here today who will argue against the validity of some of these studies, there appears to be a preponderance of evidence that a number of professional athletes who suffer repeated head trauma experience physical and mental decline earlier than the general population at large, and it would seem to me—and I stated this to Commissioner Goodell at the last hearing that we held that it would be better for the NFL and the NFLPA to be proactive in alerting its players to the risks that they face, and it's my hope that in the discussion that we have here today, the NFL and the NFLPA will make continued improvements in educating players on the dangers they face by playing with a concussion, treating those athletes appropriately who do have concussions, and removing the stigma that pressures players to play through the injury, and one of the most recent quotes that was heard on November 29th, 2009, was an interview during the pregame show before the

Steelers' matchup with the Ravens when somebody said, basically, that he had been dinged up and got right back into the game and that, you know, just because somebody's having headaches, pretty much the quote is, you know, they need to suck it up and continue to play on, and the fact of the matter is that sucking it up and continuing to play on may mean very serious and grave consequences down the line.

Many witnesses that we have had before the Committee have testified about how the NFL, like it or not, influences the lower levels of football, and the actions that they take or the actions that they choose to ignore to take have significant impact on players at lower levels. The NFL, quite frankly, has vast resources available to its disposal to educate coaches and players and medical personnel on the proper way to handle a concussed player, and if they have all these resources available to them and are not addressing the problem, imagine how can we expect every high school or college to be able to properly treat a concussed player if that proper action isn't being taken at the very top levels of the sport? (Emphases added).

167. Despite this overwhelming evidence, Goodell refused to answer questions of whether NFL-related concussions led to cognitive decline among retired players. The Judiciary Committee played a televised interview of Casson denying any links between NFL players' multiple head injuries and subsequent cognitive deterioration.

168. Sanchez pressed the issue with Goodell during his testimony as follows:

Now, the question that I have for you is, I am a little concerned, and I hear the concern expressed by some of the witnesses on the panel today, that **the NFL sort of has this kind of blanket denial or minimizing of the fact that there may be this, you know, link. And it sort of reminds me of the tobacco companies pre-1990's when they kept saying no, there is no link between smoking and damage to your health or ill health effects. And they were forced to admit that that was incorrect through a spate of litigation in the 1990's.** And my question to you is wouldn't the league be better off legally, and wouldn't high school and college football